

REMARKS

Claims 1-3 are all of the pending claims, with claims 1 and 3 being written in independent form. By virtue of this Amendment, Applicant cancels claims 4 and 5 without prejudice or disclaimer.

The Examiner rejects claims 1-3 under 35 USC § 103(a) as being obvious over US 6,238,277 to Duncan et al. (“Duncan”) in view of US 4,369,543 to Chen et al. (“Chen”). Applicant respectfully traverses this rejection in view of the following remarks.

Each of independent claims 1 and 3 defines a mobile machine that includes (among other things) “two drive motors” mechanically connected to two wheels, respectively, and “a control unit” that influences the two drive motors. At least these features (as recited in independent claims 1 and 3), in combination with the other features recited in independent claims 1 and 3, are not taught or suggested by the prior art relied upon by the Examiner.

The Examiner recognizes that Duncan is not pertinent to the claimed “two drive motors” and “control unit” features, and therefore looks to Chen to make up for the deficiencies. In so doing, the Examiner attempts to rely upon a modification of Duncan that involves implementing two drive motors and a control unit (as taught by Chen). The Examiner’s position is not convincing for the following reasons.

The Number of Grinding Disks

First, even if combined in the manner suggested by the Examiner, the prior art would still not meet each and every feature defined by claims 1 and 3. This is because, Duncan’s floor grinder includes ***only three grinding disks***, which is simply not pertinent to the four grinding disks defined by independent claims 1 and 3.

This difference is significant to the extent that four grinding disks (as claimed) may provide a balanced grinding unit, which is much less prone to drifting sideways. Accordingly, the control unit feature (as defined by claims 1 and 3) may be suitably implemented and without any mechanism for compensating sideways drift (because the sideways drift may be reduced, if not altogether avoided).

Applicant notes that Duncan does not recognize or contemplate any sideways drifting phenomenon to the extent that the “preferred embodiment” includes three grinders.¹ An odd

¹ Duncan, col. 8, lines 24-27.

number of grinding disks cannot provide the balanced characteristic offered by an even number of grinding disks.

Additional Modifications Would Have Been Required

Turning to the next point, Applicant submits that it would have been necessary to make additional modifications, not taught or suggested by the prior art, in order to combine the references in the manner suggested by the Examiner. This is because Duncan's floor grinding apparatus is a heavy duty machine, which is used in construction sites, and which requires the entire area in which it is to be operated to be closed. The motor is a combustion engine. The forces with which the grinding apparatus interacts with the floor are substantial because the floor is generally a stone or stone-like material that is to be removed.

In sharp contrast, the Chen reference is directed to a light vacuum cleaner for domestic use. The forces with which such a device interacts with a floor are far from those of the Duncan reference.

In short, Duncan and Chen relate to very different technical fields that are confronted with different problems. Consequently, those skilled in the art would have found it illogical to combine the references in the manner suggested by the Examiner.

Furthermore, those skilled in the art would have recognized that Duncan's floor grinder could not have been operated without being held by the operator, because the machine would drift sideways due to the imbalance (i.e., odd number) of the grinding disks. Such drifting must be compensated for by the operator.

If Duncan were modified (as suggested by the Examiner), then an additional compensation mechanism would need to be implemented so that the resultant device could move along a straight line. In the Chen reference, however, there is no need for compensation because the vacuum cleaner is not prone to drifting. And in the Duncan device, the compensation is provided by the operator. Duncan and Chen (taken alone or in combination) fail to teach or suggest any compensation mechanism.

In this case, it appears as if the Examiner has disregarded all of the difficulties in combining Duncan and Chen. Instead, it appears as if the Examiner has dissected the claim into discrete components and then applied individual pieces of prior art. That is the hallmark of hindsight, and not the characteristics of obviousness.

CONCLUSION

Applicant earnestly solicits reconsideration and allowance of all of the pending claims.

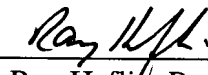
Pursuant to 37 CFR §§ 1.17 and 1.136(a), Applicant petitions for a one (1) month extension of time for filing a reply to the Office Action and submit the required \$120.00 extension fee herewith.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKY & PIERCE, P.L.C.

By



Ray Heflin, Reg. No. 41,060
P.O. Box 8910
Reston, VA 20195
(703) 668-8000

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